

CLEAN COPY OF AMENDED SPECIFICATION

BACKGROUND OF THE INVENTION

A conventional collapsed umbrella, as shown in Figure 1 and 2, includes several rib sections being pivoted in general linear alignment. When the umbrella is closed, as in Figure 3, the second rib section (2) and the third rib section (3), counted from outside, will contact each other at the at the pivot joining them. Hence, the umbrella remains slightly extended in the closed state, thereby having a large volume. Though the umbrella can be forced into a more compact closed state, as shown in Figure 4, it will elastically expand to the structure shown in Figure 3 as soon as it is released. Because of the collision between the second rib section (2) and the third rib section (3) when being folded, the collapsed (closed) umbrella can't be effectively reduced in volume.

SUMMARY OF THE INVENTION

Accordingly, it is an object of the present invention to provide an improved structure to overcome the drawback of the prior art, which uses a novel, pivoted structure to connect the second and third rib sections in side by side relationship. By that arrangement, the closed volume of the collapsed umbrella will be effectively reduced. Now, accompanying with the following drawings, the

character of the present invention will be described here and after.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a front plan view showing a conventional umbrella in an opened state.

Figure 2 is a top plan view of the umbrella in Figure 1.

Figure 3 is a front plan view of the umbrella of Figure 1 in a closed state.

Figure 4 is a plan view of the umbrella of Figure 3 being forced into a further closed state.

Figure 5 is a front plan view showing an umbrella in an opened state according to the present invention.

Figure 6 is a top plan view of the umbrella in Figure 5.

Figure 7 is a front plan view of the umbrella of Figure 5 in semi-closed state.

Figure 8 is a front plan view of the umbrella of Figure 5 in a completely closed state.

Figure 9 is a cut-away perspective view showing a joint of the umbrella according to the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring first to Figures 5 and 6, the present invention is shown and relates to an improvement in the volume of a collapsed umbrella. In the following

description, a five-folded umbrella is illustrated and it is not to limit the scope of the present invention. The character of the invention is to provide a joint (1) having a wide base for pivotally joining the second rib section (2) and the third rib section (3), counting the pivotally coupled rib sections from outside of the frame of the umbrella. As shown in Figure 9, the joint (1) is coupled to the second rib section (2) by two pins (11), (12), the pin (11) providing the pivotal coupling to third rib section (3), which is in side by side relationship with the second rib section (2) within the base of the joint (1).

When the umbrella is closed, it will first be in the state of Figure 7. Since the second rib section (2) and the third rib section (3) are side by side, they can be pivoted into a parallel position without collision therebetween, to be in the position shown in Figure 8. It can be understood that the collapsed umbrella of the present invention can be closed to have a reduced volume, effectively.

Furthermore, it will be understood that the present invention can be used in a four-folded umbrella or a six-folded, or more, collapsed umbrella structure.